

# ABSTRACT OF THE DISCLOSURE

Methods and compositions are provided for decreasing PGE2:PGF2 $\alpha$ , regulating ratios of zinc:cadmium and regulating the concentration of zinc, calcium and zinc-containing and PGE2-dependent matrix metalloproteinases in body fluids and tissues of a human. Elevated or otherwise unregulated levels of PGE2, zinc and calcium and elevated concentrations of zinc-containing and PGE2-dependent matrix metalloproteinases have been found to be associated with the development of certain diseases.